

GenCore version 4.5
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OM protein - protein search, using sw model

Run on: October 15, 1999, 00:29:31 ; Search time 29.22 Seconds
(without alignments)
255.037 Million cell updates/sec

Title: US-09-185-258-6
Perfect score: 1001
Sequence: 1 EKPLHALLHGRGVCLNEKSY.....GMEYVDGDFQCHTFDSSNVE 186

Scoring table: BLOSUM62

Searched: 122810 seqs, 40065486 residues

Database : PIR.60.*
1: pir1.*
2: pir2.*
3: pir3.*
4: pir4.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	995	99.4	272	2	A53748	insulin-like growt
2	980	97.9	271	2	JC4584	insulin-like growt
3	968	96.7	271	2	I48604	insulin-like growt
4	965	96.4	271	2	JC1463	insulin-like growt
5	353	35.3	291	1	JN0064	insulin-like growt
6	346	34.6	266	2	A35037	insulin-like growt
7	344	34.4	291	1	IOH03	insulin-like growt
8	327	32.7	292	2	A36748	insulin-like growt
9	321	32.1	291	2	I48602	insulin-like growt
10	308	30.8	111	2	B45403	insulin-like growt
11	267.5	26.7	240	2	A39842	insulin-like growt
12	252	25.2	238	2	I48605	insulin-like growt
13	242.5	24.2	226	2	JN0464	insulin-like growt
14	242	24.2	258	2	A43403	insulin-like growt
15	238	23.8	237	2	I47031	insulin-like growt
16	237	23.7	258	2	G01662	insulin-like growt
17	237	23.7	258	2	B37252	insulin-like growt
18	225	22.5	254	2	I48599	insulin-like growt
19	225	22.5	254	2	I48603	insulin-like growt
20	225	22.5	254	2	JC1464	insulin-like growt
21	201	20.1	310	2	A60967	insulin-like growt
22	195.5	19.5	272	2	I48600	insulin-like growt
23	192	19.2	317	2	I46916	insulin-like growt
24	184.5	18.4	272	2	A36082	insulin-like growt
25	179.5	17.9	304	2	A33274	insulin-like growt
26	179	17.9	328	1	A41927	insulin-like growt
27	177	17.7	259	1	IOH01	insulin-like growt
28	173.5	17.3	122	2	T01404	insulin-like growt
29	173	17.3	263	2	S23009	insulin-like growt
30	172	17.2	305	2	I48601	insulin-like growt
31	171	17.1	305	2	JN0508	insulin-like growt
32	164.5	16.4	122	2	C45403	insulin-like growt
33	122	12.2	439	2	S33293	testican - human
34	110	11.0	2767	1	UIHU	thyroglobulin prec
35	107	10.7	1247	1	MMHUND	nidogen precursor
36	102	10.2	492	2	A28616	M5 protein precurs
37	98.5	9.8	212	2	I46176	thyroglobulin prec
38	98.5	9.8	314	2	A46489	pan-epithelial gly
39	97	9.7	1376	2	G00043	osteonidogen - hum

thyroglobulin prec
thyroglobulin 2 pr
nidogen precursor
M6 protein - Strep
M2 protein precurs
IgA receptor - Str

ALIGNMENTS

RESULT 1
A53748
insulin-like growth factor-binding protein 5 precursor - human
N:Alternate names: IGFBP-5
C:Species: Homo sapiens (man)
C:Date: 06-Jan-1995 #sequence_revision 31-Dec-1995 #text_change 20-Mar-1998
C:Accession: A53748; B40403; JH0391; PH0143
R:Allander, S.V.; Larsson, C.; Ehrenborg, E.; Suwanichkul, A.; Weber, G.; Morris, S.L
J. Biol. Chem. 269, 10891-10898, 1994
A:Title: Characterization of the chromosomal gene and promoter for human insulin-like
A:Reference number: A53748; MUID:94193798
A:Accession: A53748
A:Molecule type: DNA
A:Residues: 1-272 <ALL>
A:Cross-references: GB:L27556; GB:L27557; GB:L27558; GB:L27559; NID:g452057; PID:g505
R:Shimasaki, S.; Shimomura, M.; Zhang, H.P.; Ling, N.
J. Biol. Chem. 266, 10646-10653, 1991
A:Title: Identification of five different insulin-like growth factor binding proteins
A:Reference number: A40403; MUID:91244847
A:Accession: B40403
A>Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-272 <SHI>
A:Cross-references: GB:M62782; NID:g184817; PID:g184818
A:Experimental source: placenta
R:Kiefer, M.C.; Ioh, R.S.; Bauer, D.M.; Zapf, J.
Biochem. Biophys. Res. Commun. 176, 219-225, 1991
A:Title: Molecular cloning of a new human insulin-like growth factor binding protein.
A:Reference number: JH0391; MUID:91207396
A:Accession: JH0391
A:Molecule type: mRNA
A:Residues: 1-272 <KIE>
A:Cross-references: GB:M65062; NID:g184819; PID:g184820
A:Experimental source: osteosarcoma
R:Andress, D.L.; Birnbaum, R.S.
Biochem. Biophys. Res. Commun. 176, 213-218, 1991
A:Title: A novel human insulin-like growth factor binding protein secreted by osteobl
A:Reference number: PH0143; MUID:91207395
A:Accession: PH0143
A:Molecule type: protein
A:Residues: 24-37 'X', 39-41 'X', 43 <AND>
A:Experimental source: cell line V-2
C:Comment: insulin-like growth factors occur in serum and other biological fluids com
C:Genetics:
A:Gene: GDB:IGFEP5
A:Cross-references: GDB:I26837
A:Map position: 17q12-17q21
C:Superfamily: thyroglobulin type I repeat homology
F:1-23/Domain: signal sequence #status predicted <SIG>
F:24-272/Product: insulin-like growth factor-binding protein 5 #status predicted <IGF
F:192-263/Domain: thyroglobulin type I repeat homology <THV1>

Query Match 99.4%; Score 995; DB 2; Length 272;
Best Local Similarity 99.5%; Pred. No. 1.1e-76;
Matches 185; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 EKPLHALLHGRGVCLNEKSYREQVKIERDSHEHEPTTSEMAEETYSKIFRPKTRISE 60
DB 87 EKPLHALLHGRGVCLNEKSYREQVKIERDSHEHEPTTSEMAEETYSKIFRPKTRISE 146
QY 61 LKAEAV<KDRF<KLTSQSFVGAENTAHPRIISEPEMQESQGPCRRHMEASLQELKAS 120

|||||
Db 147 LKAEAVKDRKKLTQSKFVGGAENTAHPRISAPENRQESQGPCRRHMEASLQELKAS 206
QY 121 PRMVPRAYLPNCDRKGFYKRRKQKPSRGRKRGICWCVDKYGKMLPGMEYVDGDFQCHTF 180
|||||
Db 207 PRMVPRAYLPNCDRKGFYKRRKQKPSRGRKRGICWCVDKYGKMLPGMEYVDGDFQCHTF 266
QY 181 DSSNVE 186
|||||
Db 267 DSSNVE 272

RESULT 2
JC4584
insulin-like growth factor binding protein-5 precursor - pig
C:Species: Sus scrofa domestica (domestic pig)
C:Date: 10-Apr-1996 #sequence_revision 24-May-1996 #text_change 13-Nov-1998
C:Accession: J04584; G23734
R:White, M.E.; Diao, R.; Hathaway, M.R.; Mickelson, J.; Dayton, W.R.
Biochem. Biophys. Res. Commun. 218, 248-253, 1996
A:Title: Molecular cloning and sequence analysis of the porcine insulin-like growth factor
A:Reference number: JC4584; MUID:96136309
A:Accession: JC4584
A:Molecule type: mRNA
A:Residues: 1-271 <WHI>
A:Cross-references: GB:U41340; NID:g1173906; PID:g1173907
A:Experimental source: skeletal muscle
R:Shimasaki, S.; Gao, L.; Shimomaka, M.; Ling, N.
Mol. Endocrinol. 5, 938-948, 1991
A:Title: Isolation and molecular cloning of insulin-like growth factor-binding protein-6
A:Reference number: A23734; MUID:92049376
A:Accession: G23734
A:Molecule type: protein
A:Residues: 20-25,'X',27-28,'X',30-36,'X',38-39 <SHI>
C:Comment: This protein has essential roles in the regulation and coordination of insulin
lays a role during myoblast proliferation and differentiation, and is important in the
C:Superfamily: thyroglobulin type I repeat homology
C:Keywords: differentiation; growth factor; skeletal muscle
F:1-19/Domain: signal sequence #status predicted <SIG>
F:20-27/Product: insulin-like growth factor binding protein-5 #status experimental <WAT
F:191-262/Domain: thyroglobulin type I repeat homology <THY1>

Query Match 97.9%; Score 980; DB 2; Length 271;
Best Local Similarity 97.3%; Pred. No. 1.9e-75;
Matches 181; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

QY 1 EKPLHALLHGRGVCNLNEKSYREQVKIERDSREHEPTTSEMAEETYSPIKFRPKHTRISE 60
|||||
Db 86 EKPLHALLHGRGVCNLNEKSYREQVKIERDSREHEPTTSEMAEETYSPIKFRPKHTRISE 145
QY 61 LKAEAVKDRKKLTQSKFVGGAENTAHPRISAPENRQESQGPCRRHMEASLQELKAS 120
|||||
Db 146 LKAEAVKDRKKLTQSKFVGGAENTAHPRISAPENRQESQGPCRRHMEASLQELKAS 205
QY 121 PRMVPRAYLPNCDRKGFYKRRKQKPSRGRKRGICWCVDKYGKMLPGMEYVDGDFQCHTF 180
|||||
Db 206 PRMVPRAYLPNCDRKGFYKRRKQKPSRGRKRGICWCVDKYGKMLPGMEYVDGDFQCHTF 265
QY 181 DSSNVE 186
|||||
Db 266 DSSNVE 271

RESULT 3
I48604
insulin-like growth factor binding protein 5 precursor - mouse
C:Species: Mus musculus (house mouse)
C:Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 17-Mar-1999
C:Accession: I48604; A48699; A54259
R:Schuller, A.G.; Groffen, C.; van Neck, J.W.; Zwarthoff, E.C.; Drop, S.L.
Mol. Cell. Endocrinol. 104, 57-66, 1994
A:Title: cDNA cloning and mRNA expression of the six mouse insulin-like growth factor bf

A:Reference number: I48600; MUID:95121750
A:Accession: I48604
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-271 <RES>
A:Cross-references: EMBL:X81583; NID:g550384; PID:g550385
R:James, P.L.; Jones, S.B.; Busby Jr., W.H.; Clemmons, D.R.; Rotwein, P.
J. Biol. Chem. 268, 22305-22312, 1993
A:Title: A highly conserved insulin-like growth factor-binding protein (IGFBP-5) is e
A:Reference number: A48699; MUID:94042976
A:Accession: A48699
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-271 <JAM>
A:Cross-references: GB:U12447; NID:g425405; PID:g293384
R:Kou, K.; Jenkins, N.A.; Gilbert, D.J.; Copeland, N.G.; Rotwein, P.
Genomics 20, 412-418, 1994
A:Title: Organization, expression, and chromosomal location of the mouse insulin-like
A:Reference number: A54259; MUID:94307727
A:Accession: A54259
A:Molecule type: DNA
A:Residues: 1-111 <KOU>
A:Cross-references: GB:U02023
C:Genetics:
A:Gene: IGFBP-5
C:Superfamily: thyroglobulin type I repeat homology
F:191-262/Domain: thyroglobulin type I repeat homology <THY1>

Query Match 96.7%; Score 968; DB 2; Length 271;
Best Local Similarity 95.7%; Pred. No. 2e-74;
Matches 178; Conservative 2; Mismatches 6; Indels 0; Gaps 0;

QY 1 EKPLHALLHGRGVCNLNEKSYREQVKIERDSREHEPTTSEMAEETYSPIKFRPKHTRISE 60
|||||
Db 86 EKPLHALLHGRGVCNLNEKSYREQVKIERDSREHEPTTSEMAEETYSPIKFRPKHTRISE 145
QY 61 LKAEAVKDRKKLTQSKFVGGAENTAHPRISAPENRQESQGPCRRHMEASLQELKAS 120
|||||
Db 146 LKAEAVKDRKKLTQSKFVGGAENTAHPRISAPENRQESQGPCRRHMEASLQELKAS 205
QY 121 PRMVPRAYLPNCDRKGFYKRRKQKPSRGRKRGICWCVDKYGKMLPGMEYVDGDFQCHTF 180
|||||
Db 206 PRMVPRAYLPNCDRKGFYKRRKQKPSRGRKRGICWCVDKYGKMLPGMEYVDGDFQCHTF 265
QY 181 DSSNVE 186
|||||
Db 266 DSSNVE 271

RESULT 4
JC1463
insulin-like growth factor-binding protein 5 precursor - rat
C:Species: Rattus norvegicus (Norway rat)
C:Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 10-Sep-1997
C:Accession: JC1463; A40403; F40403
R:Zhu, X.; Ling, N.; Shimasaki, S.
Biochem. Biophys. Res. Commun. 190, 1045-1052, 1993
A:Title: Cloning of the rat insulin-like growth factor binding protein-5 gene and DN
A:Reference number: JC1463; MUID:93176146
A:Accession: JC1463
A:Molecule type: DNA
A:Residues: 1-271 <ZHU>
A:Cross-references: GB:U08275
R:Shimasaki, S.; Shimomaka, M.; Zhang, H.P.; Ling, N.
J. Biol. Chem. 266, 10646-10653, 1991
A:Title: Identification of five different insulin-like growth factor binding proteins
A:Reference number: A40403; MUID:91244847
A:Accession: A40403
A:Molecule type: mRNA
A:Residues: 1-271 <SHI>
A:Cross-references: GB:M62781; NID:g204745; PID:g204746
A:Accession: F40403

A:Status: preliminary
A:Molecule type: Protein
A:Residues: 20-25, 'X', 27-28, 'X', 30-36, 'X', 38-43, 'X', 45-51, 'X', 53, 'XX' <SH2>
C:Genetics:
A:Introns: 112/3; 188/3; 228/3
C:Superfamily: thyroglobulin type I repeat homology
F:1-19/Domain: signal sequence #status predicted <SIG>
F:20-271/Product: insulin-like growth factor binding protein 5 #status predicted <NAT>
F:191-262/Domain: thyroglobulin type I repeat homology <THY1>

Query Match	96.4%	Score 965;	DB 2;	Length 271;
Best Local Similarity	95.2%;	Pred. No. 3.5e-74;		
Matches 177;	Conservative 3;	Mismatches 6;	Indels 0;	Gaps 0;
Qy	1	EXPLHALLHGRGVCLEKSYEQVKIERDSREHEEPTTSEMAEETYSKPIRPKHTRISE	60	
Db	86	EXPLHALLHGRGVCLEKSYGEQTKIERDSREHEEPTTSEMAEETYSKPIRPKHTRISE	145	
Qy	61	LKAEAVKDDRKKLTQSKFVGGAENTAHPRIIISPEPMRQESSEQPCRHRMEASLOELKAS	120	
Db	146	LKAEAVKDDRKKLTQSKFVGGAENTAHPRVIPAPEMRQESDQGPCRRHMEASLOEFKAS	205	
Qy	121	PRMVPRAVYLPNCDRKGFYARKCKPSRGRKRGICWCVDKYGMKLPGMGEYVDGDFQCHTF	180	
Db	206	PRMVPRAVYLPNCDRKGFYARKCKPSRGRKRGICWCVDKYGMKLPGMGEYVDGDFQCHAF	265	
Qy	181	DSSNVE	186	
Db	266	DSSNVE	271	

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RESULT      5
JN0064
insulin-like growth factor-binding protein 3 precursor - bovine
C:Species: Bos primigenius taurus (cattle)
C:Date: 21-Nov-1993 #sequence_revision 05-Apr-1995 #text_change 05-Sep-1997
C:Accession: JN0064; A37403
R:Spratt, S.K.; Tatsuno, G.P.; Sommer, A.
Biochem. Biophys. Res. Commun. 177, 1025-1032, 1991
A:Title: Cloning and characterization of bovine insulin-like growth factor binding protein
A:Reference number: JN0064; MUID:91282738
A:Accession: JN0064
A:Molecule type: mRNA
A:Residues: 1-291 <SPR>
A:Cross-references: GB:1M76478; NID:gl63189; PID:gl63190
A:Experimental source: liver
R:Conover, C.A.; Ronk, M.; Lombana, F.; Powell, D.R.
Endocrinology 127, 2795-2803, 1990
A:Title: Structural and biological characterization of bovine insulin-like growth factor
A:Reference number: A37403; MUID:91065246
A:Accession: A37403
A:Molecule type: protein
A:Residues: 28-52 <CON>
C:Genetics:
A:Gene: IGFBP-3
C:Superfamily: insulin-like growth factor binding protein 1; thyroglobulin type I repeat
F:1-27/Domain: signal sequence #status predicted <SIG>
F:28-291/Product: insulin-like growth factor-binding protein 3 #status predicted <MAT>
F:213-285/Domain: thyroglobulin type I repeat homology <TVL>
F:118,136,199/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match      35.3%; Score 353; DB 1; Length 291;
Best Local Similarity 37.6%; Pred. No. 9.3e-23;
Matches 73; Conservative 28; Mismatches 73; Indels 20; Gaps 4;

QY      2  KPLHALLHGRGVCNLKSEYRE----QVKIERDSREHEEPTISEMAEITYSPKI----- 51
      ||| ||||| ||| : : : ||| : |
Db      104  RPLQALLDGRGLCANASVGRRLPYLLPSAGNSEGESEEDHSMGSTENQAGPSTHRVPVS 163
      ||| ||||| ||| : : : ||| : |
QY      51  -FRPKHTRISELKAENVKDDRRKKLTOSKVFYGGAEHTAHPRIISEPEMROSEQGPCHRRH 109

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	: : }	: :	: :	: :	
164	KEHPDHTKMDYIKKGHAKDSORYKVDYESQSTDQTQNES-----SESKRETEYGPORRE	216			
Qy	110 MEASLOELKASPRMVPRAVYLPNCNDRKGFKYKROCKPSRGRKICWCVCVDKYGMKLPQME	169			
	: : : : : : : : : : : : : :				
Db	217 MEDTLNLHLKFLTNLSPRGIIHPNCNDRKKGFYKKKOCRFSGKGRKFCMCVCVDKYGQPLPGFD	276			
Qy	170 YV-DGDFQCHTFDS	182			
Db	277 VKGKGDVHCYSMES	290		: :	

RESULT 6

insulin-like growth factor-binding protein 3 homolog - pig
A35037

C:Species: Sus scrofa domestica (domestic pig)
C:Date: 20-Jul-1990 #sequence_revision 20-Jul-1990 #text_change 01-Dec-1995
C:Accession: A35037

E:Shimasaki, S.; Shimonaka, M.; Ui, M.; Inouye, S.; Shibata, F.; Ling, N.
J. Biol. Chem. 265, 2198-2202, 1990

A:Title: Structural characterization of a follicle-stimulating hormone action inhibitor
A:Reference number: A35037; MUID:90130475

A:Accession: A35037

A:Status: preliminary

A:Molecule type: mRNA

A:Residues: 1-266 <SH1>

A:Cross-references: GB:J05228

C:Superfamily: insulin-like growth factor binding protein 1; thyroglobulin type I rep
F:188-260/Domain: thyroglobulin type I repeat homology <THY1>

Query Match	34.6%	Score	346;	DB 2;	Length	266;
Best Local Similarity	37.7%;	Pred. No.	3.3e-22;			
Matches	72;	Conservative	32;	Mismatches	75;	Indels
					12;	Gaps
						4;

Qy	2	KPLHALLHGRGVCNEXS-----YREQVKIERDSREHEPTTSEMAEETYSKPIFRPK	54
		: : : : : : : : : : :	
Db	77	RPLQALLDGRGICANASAGFLRAYLPPAPPAPGSESEEDRSVDSENAQALPSTIRVP	136
Qy	55	HTRISEL--KAEAVYKKDRKKLTQSTKTVGGAGNTAHPIIISEPEMRQSEOGPCRRHMEA	112
		::: : : : : : : : : : : : : : :	
Db	137	DSKLHSVHTKMDVIKKGHAKDSQYKYVDYESQSTDTQNFSS--ESKRETEYXGPCRREMED	194
Qy	113	SLQELKASPRMVPRAVYLLPNCDRKGFGYKKOCKPSRGKRGICWCVDKYGNMKLLPGMEYV-	172
		: : : : : : : : : : : : : :	
Db	195	TLNHLKFLNMLSPRGIIHIPNCDKKGFGYKKCKRPSKGRKRGFCWCVDRYGQPLGFGDKG	254
Qy	172	DGDFQCHTFDS	182
		: : : :	
Db	255	KGDVHCYSMES	265

RESULT 7
IOHU3
insulin-like growth factor-binding protein 3 precursor - human
N:Alternate names: insulin-like growth factor 53K binding protein
C:Species: Homo sapiens (man)
C:Date: 30-Sep-1992 #sequence revision 30-Sep-1992 #text change 24-Oct-1997
C:Accession: A36578; A3940; A61038; B35803; B54651; I37622
R:Cubbager, M.B.; Suwanichkul, A.; Powell, D.R.
J. Biol. Chem. 265, 12642-12649, 1990
A:Title: Insulin-like growth factor binding protein-3. Organization of the human chro
A:Reference number: A36578; PMID:90324259
A:Accession: A36578
A:Molecule type: DNA
A:Residues: 1-291 <CUB>
A:Cross-references: GB:M35878; GB:J05537; NID:q184522; PID:q386791
R:Wood, W.I.; Cachianes, G.; Henzel, W.J.; Winslow, G.A.; Spencer, S.A.; Hellmiss, R.
Mol. Endocrinol. 2, 1176-1185, 1988
A:Title: Cloning and expression of the growth hormone-dependent insulin-like growth f
A:Reference number: A34940; PMID:89112197
A:Accession: A34940
A:Molecule type: mRNA

[illegible]

Db 178 VYRGATLVPCNDHRGFGYKRCRSGQGRGFCWCVDKMGSLPSPGNGSSSGPTG 237
QY 181 DS 182
Db 238 SS 239
RESULT 12
I48605
A:Title: insulin-like growth factor binding protein-6 - mouse
C:Species: Mus musculus (house mouse)
C>Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 10-Oct-1997
C:Accession: I48605
R:Schuller, A.G.; Groffen, C.; van Neck, J.W.; Zwarthoff, E.C.; Drop, S.L.
Mol. Cell. Endocrinol. 104, 57-66, 1994
A:Title: cDNA cloning and mRNA expression of the six mouse insulin-like growth factor b
A:Reference number: I48600; MUID:95121750
A:Accession: I48605
A>Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-238 <RES>
A:Cross-references: EMBL:X81584; NID:g550386; PID:g550387
C:Genetics:
A:Gene: IGFBP-6
C:Superfamily: thyroglobulin type I repeat homology
F:160-232/Domain: thyroglobulin type I repeat homology <THY1>
Query Match 25.2%; Score 252; DB 2; Length 238;
Best Local Similarity 33.1%; Pred. No. 2.3e-14;
Matches 60; Conservative 25; Mismatches 52; Indels 44; Gaps 5;
QY 1 EKPLHALLHGRGVLNKSREYQVKIERDSREHEEPTTSEMAEETYSKIFRPKHTRISE 60
Db 92 ETPLRALLIGQRC-----QARGPSEETKESKPGGASRSDTNH----- 134
QY 61 LKAEAVKKDRKKLTQSKFVGGAENTAHPRIS---EPEMRQSEEOGPCRRHMEASLQEL 117
Db 134 -----DRQK-----NPTSAAPIRPNVQDSEMGPCRRHLDVSLQQL 171
QY 118 KASP-RMVPRAVLPNCDRKGFYKRCQKPSGRKRGICWCVDKYGKMLPGMEYVDGDFQ 176
Db 172 QTEVFRGGARGLYVPNCDLRGFYRKQCRSSQGNRRGFCWCPMGQPLVSPDGGSGTQ 231
QY 177 C 177
Db 232 C 232
RESULT 13
JN0464
insulin-like growth factor-binding protein 6 precursor - rat
C:Species: Rattus norvegicus (Norway rat)
C>Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 20-Mar-1998
C:Accession: JN0464; A23734; G40403
R:Zhu, X.; Ling, N.; Shimasaki, S.
Biochem. Biophys. Res. Commun. 191, 1237-1243, 1993
A:Title: Structural characterization of the rat insulin-like growth factor binding prote
A:Reference number: JN0464; MUID:93221493
A:Accession: JN0464
A:Molecule type: DNA
A:Residues: 1-226 <ZHU>
A:Cross-references: GB:L11006
R:Shimasaki, S.; Gao, L.; Shimonaka, M.; Ling, N.
Mol. Endocrinol. 5, 938-948, 1991
A:Title: Isolation and molecular cloning of insulin-like growth factor-binding protein-6
A:Reference number: A23734; MUID:92049376
A:Accession: A23734
A:Molecule type: mRNA
A:Residues: 1-226 <SHI>
A:Cross-references: GB:M69055; NID:G206586; PID:g206587
R:Shimasaki, S.; Shimonaka, M.; Zhang, H.P.; Ling, N.

J. Biol. Chem. 266, 10646-10653, 1991
A:Title: Identification of five different insulin-like growth factor binding proteins
A:Reference number: A40403; MUID:91244847
A:Accession: G40403
A>Status: preliminary
A:Molecule type: protein
A:Residues: 26-29,'X',31-32,'X',34-38 <SH2>
C:Genetics:
A:Gene: IGFBP-6
C:Introns: 104/1; 145/3; 186/3
C:Superfamily: thyroglobulin type I repeat homology
F:148-220/Domain: thyroglobulin type I repeat homology <THY1>
Query Match 24.2%; Score 242.5; DB 2; Length 226;
Best Local Similarity 31.5%; Pred. No. 1.3e-13;
Matches 57; Conservative 27; Mismatches 50; Indels 47; Gaps 6;
QY 1 EKPLHALLHGRGVLNKSREYQVKIERDSREHEEPTTSEMAEETYSKIFRPKHTRISE 60
Db 83 ETPLRALLIGQRCQARGPSEET--TKESKPHGGAS-----RPR----- 121
QY 61 LKAEAVKKDRKKLTQSKFVGGAENTAHPRIS---EPEMRQSEEOGPCRRHMEASLQEL 117
Db 121 -----DRQK-----NPTSAAPIRSPVQDSEMGPCRRHLDVSLQQL 159
QY 118 KASP-RMVPRAVLPNCDRKGFYKRCQKPSGRKRGICWCVDKYGKMLPGMEYVDGDFQ 176
Db 160 QTEVFRGGARGLYVPNCDLRGFYRKQCRSSQGNRRGFCWCPMGQPLVSPDGGSGSQ 219
QY 177 C 177
Db 220 C 220
RESULT 14
A45403
insulin-like growth factor-binding protein 4 - bovine
C:Species: Bos primigenius taurus (cattle)
C>Date: 10-Jun-1993 #sequence_revision 18-Nov-1994 #text_change 29-Jan-1999
C:Accession: A45403
R:Moser, D.R.; Lowe Jr., W.L.; Dake, B.L.; Booth, B.A.; Boes, M.; Clemmons, D.R.; Bar
Mol. Endocrinol. 6, 1805-1814, 1992
A:Title: Endothelial cells express insulin-like growth factor-binding proteins 2 to 6
A:Reference number: A45403; MUID:93125553
A:Accession: A45403
A>Status: preliminary
A:Molecule type: mRNA; protein
A:Residues: 1-258 <MOS>
A:Cross-references: GB:S52770; NID:g263303; PID:g263304
A:Experimental source: pulmonary artery endothelial cells
A:Note: sequence extracted from NCBI backbone (NCBIN:122183, NCBI:122184)
C:Superfamily: thyroglobulin type I repeat homology
F:174-249/Domain: thyroglobulin type I repeat homology <THY1>
Query Match 24.2%; Score 242; DB 2; Length 258;
Best Local Similarity 32.8%; Pred. No. 1.7e-13;
Matches 62; Conservative 25; Mismatches 76; Indels 26; Gaps 6;
QY 1 EKPLHALLHGRGVLNKSREYQVKIE--RDSREHEEPTTSEMAEETYSKIFRPKHTRI 58
Db 87 EKPLHLLVHGQVCN-----ELAEIEAIQESLQPSDKDEGHPNNSFP---CSAHRK 137
QY 59 SELKAEAVKKDRKKLTQSKFVGGAENTAHPRISIEPEMRQSEEOGPCRRHMEASLQEL 118
Db 138 CLQKHLAKIRDSRSGGKMKVIGAPREARP-----VPGQSCQSELHRALELA 186
QY 119 ASPRMVPRVY---LPNCDRKGFYKRCQKPSGRKRGICWCVD-KYGMKLPGMHEYVDGD 174
Db 187 ASQSRTHEDLYIPIPCNDRNGNFHPKOCHPALDQGRGKCWCVDKRTKGVKLPFGLEPKGE 246
QY 175 FQCHTFDSS 183

